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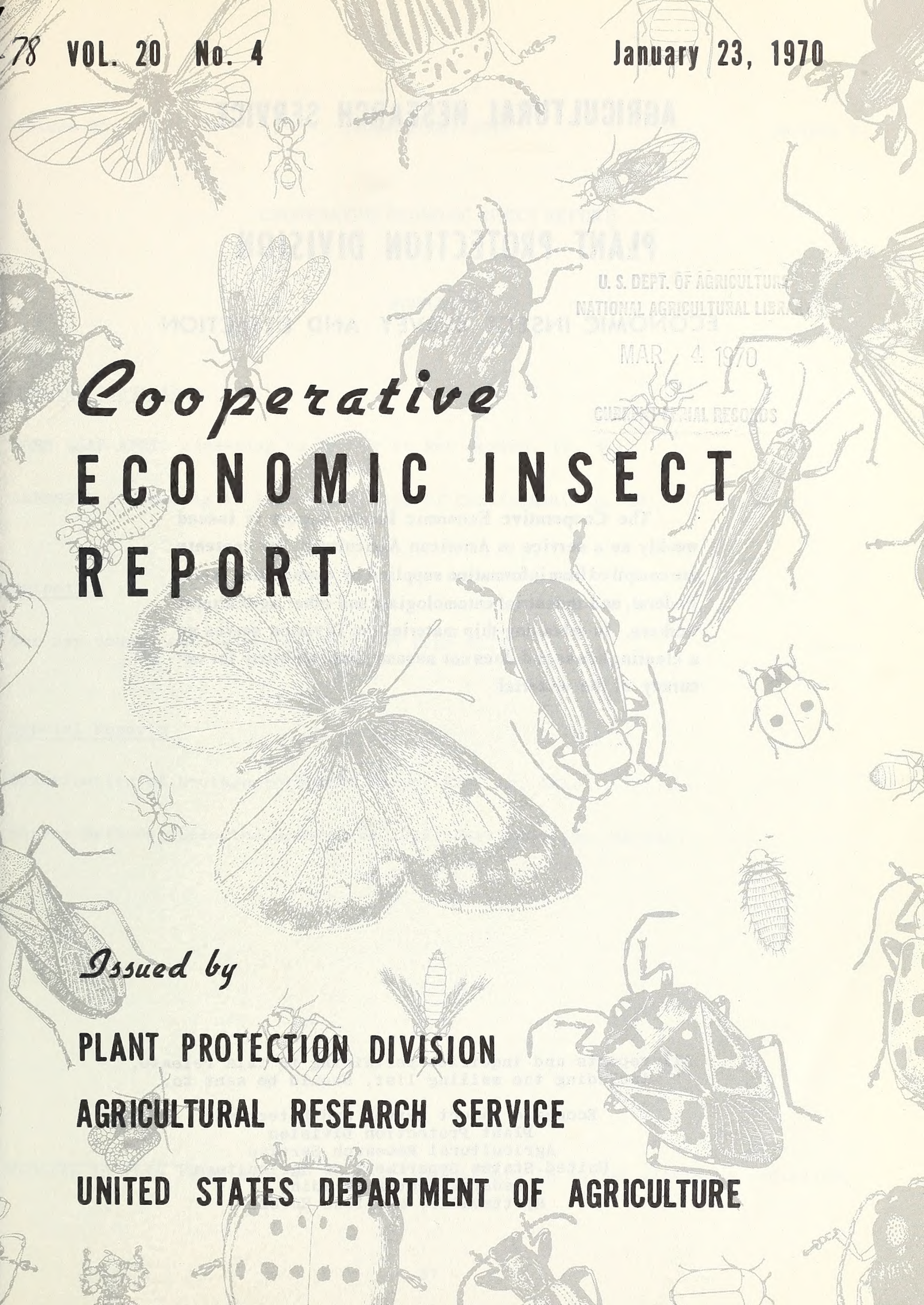

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Cooperative
ECONOMIC INSECT REPORT

Issued by

PLANT PROTECTION DIVISION
AGRICULTURAL RESEARCH SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE

AGRICULTURAL RESEARCH SERVICE

PLANT PROTECTION DIVISION

ECONOMIC INSECT SURVEY AND DETECTION

The Cooperative Economic Insect Report is issued weekly as a service to American Agriculture. Its contents are compiled from information supplied by cooperating State, Federal, and industrial entomologists and other agricultural workers. In releasing this material the Division serves as a clearing house and does not assume responsibility for accuracy of the material.

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Plant Protection Division
Agricultural Research Service
United States Department of Agriculture
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Hyattsville, Maryland 20782

Volume 20 January 23, 1970 Number 4

COOPERATIVE ECONOMIC INSECT REPORT

HIGHLIGHTS

Current Conditions

CORN LEAF APHID appearing on barley in New Mexico. (p. 39).

GREENBUG increasing in Imperial Valley of California. (p. 39).

Detection

For new county and island records see page 41.

Special Reports

Distribution of Southwestern Corn Borer. Map. (p. 42).

Survey Methods. Selected References 1946. Part XXV. (pp. 43-44).

Reports in this issue are for week ending January 16 unless otherwise indicated.

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WEATHER BUREAU'S 30-DAY OUTLOOK

MID-JANUARY TO MID-FEBRUARY

The Weather Bureau's 30-day outlook for mid-January to mid-February is for temperatures to average below seasonal normals in the eastern half of the Nation and above normal west of the Divide. Elsewhere near normal temperatures are in prospect. Precipitation is expected to exceed normal over the Gulf and South Atlantic Coast States as well as over the Pacific Northwest. Subnormal totals are indicated for the southern Plateau Region, the upper Mississippi Valley, and the upper Great Lakes. In unspecified areas near normal precipitation is expected.

Weather forecast given here is based on the official 30-day "Resume and Outlook" published twice a month by the Weather Bureau. You can subscribe through the Superintendent of Documents, Washington, D.C. 20250. Price $5.00 a year.

WEATHER OF THE WEEK ENDING JANUARY 19

HIGHLIGHTS: Warming over the West brought average temperatures to 6° to 15° above normal over most of area. The East continued colder than normal in spite of brief warming at midweek.

PRECIPITATION: Widespread cloudiness prevailed over most of the Nation early in the week. Precipitation was not widespread, however. Rainy weather continued along the Pacific coast from Washington to central California with snow in the Cascades and northern Sierras and eastward to the northern and central Rocky Mountains. Light snow flurries occurred in the northern Great Plains and heavier snow fell from the Great Lakes to New England. Several inches of new snow accumulated in parts of western New York and northern New England. The wet-weather pattern spread over more of the Nation about midweek. Rain or snow fell over most of the western States from Montana to Arizona and New Mexico, rain fell in southern Texas and thunderstorms developed in the Florida Peninsula with the heaviest showers in the south. On the morning of January 19 snow covered most of the northern half of the Nation being deepest, as usual, in the Cascades where up to 100 inches existed at some locations. Heavy rains along the Pacific coast produced 4 to 5-inch totals along the Oregon and northern California coast and up to 8 inches in the Sierras. A severe windstorm accompanied by up to 2 inches of rain caused heavy damage to fruit and vegetable crops in Hawaii on Tuesday.

TEMPERATURE: At the beginning of the week, a High continued to pour subzero weather into New York and New England. Watertown, New York, registered -30° on Monday morning January 12. Another outbreak of arctic air surged into the northern Great Plains and held midday temperatures to zero or lower from eastern Montana to northern Minnesota. Temperatures warmed slightly in the Southeast in the first half of the week reaching the 50's as far north as western Tennessee by midweek. Weather of the week continued on page 41.

SPECIAL INSECTS OF REGIONAL SIGNIFICANCE

CORN LEAF APHID (Rhopalosiphum maidis) - NEW MEXICO - Light on barley in Dona Ana County. (N.M. Coop. Rpt.).

GREENBUG (Schizaphis graminum) - CALIFORNIA - Increasing rapidly in Imperial Valley, Imperial County. Considerable concern about infestations on small grains. (Cal. Coop. Rpt.). ARIZONA - Averaged 35 per 100 sweeps of sorghum in 2 fields at Yuma, Yuma County. (Ariz. Coop. Sur.). TEXAS - Light to heavy numbers in Rolling Plains during period of December 15-26. Light to heavy in Childress. Light to medium in Knox, Foard, Hardeman, Archer, and Jones Counties. Heavy in Motley County; some controls applied. Populations in panhandle for week ending January 9 suppressed by cold weather. (Boring, Daniels). Current activity throughout State negligible except in isolated areas. Populations in northwest and panhandle areas suppressed by cold weather. (Green). OKLAHOMA - Counts reduced about 90 percent in Payne County due to cold weather. Averaged about 15 per linear foot. (Okla. Coop. Sur.). KANSAS - None in wheat in following counties: Franklin, Johnson, Rooks, Graham, Trego, Chase, Morris, and Marshall. Ranged 1-5 per linear foot in Pottawatomie, Jackson, Nemaha, and Brown Counties. (Redding et al.).

SPOTTED ALFALFA APHID (Therioaphis maculata) - ARIZONA - Light in frost damaged fields of alfalfa in Maricopa and Yuma Counties. (Ariz. Coop. Sur.).

CORN, SORGHUM, SUGARCANE

EUROPEAN CORN BORER (Ostrinia nubilalis) - ALABAMA - Larvae ranged 3-7 per cornstalk in one field in Chilton County on January 6. Very light in several fields in Autauga County. (Sparks et al.).

TURF, PASTURES, RANGELAND

FIRE ANT (Solenopsis geminata) - TEXAS - Heavy along highway roadside near Clay in Burleson County and south of Navasota in Grimes County, also near College Station in Brazos County. (Barham, Green).

A HARVESTER ANT (Pogonomyrmex californicus) - UTAH - Collected at St. George, Washington County, June 12, 1969, by G.F. Knowlton. Determined by G.C. Wheeler. This is a new county record. (Knowlton).

FORAGE LEGUMES

PEA APHID (Acyrthosiphon pisum) - NEW MEXICO - Generally light on alfalfa in Dona Ana County. (N.M. Coop. Rpt.). ARKANSAS - Limited survey negative in few northwest areas. (Boyer).

DECIDUOUS FRUITS AND NUTS

HICKORY SHUCKWORM (Laspeyresia caryana) - ALABAMA - Numerous overwintering larvae in old shucks underneath 75 pecan trees in Lee and Elmore Counties. (McQueen).

CITRUS

Citrus Insect Situation in Florida - End of December 1969 - CITRUS RUST MITE (Phyllocoptruta oleivora) infested 82 (norm 62) percent of groves; economic in 55 (norm 43) percent. Population again on increase and still above normal and in high range. Slight increase expected on both leaves and fruit. All districts high. CITRUS RED MITE (Panonychus citri) infested 41 (norm 35) percent of groves; economic in 11 (norm 12) percent. Population at low level and normal for year end. Slight increase expected. Highest districts west and east. TEXAS CITRUS MITE (Eutetranychus banksi) infested 32 (norm 38) percent of groves; economic in 11 (norm 14) percent. Population in low range and below normal for December. Little change expected. Highest district central. GLOVER SCALE (Lepidosaphes gloverii) infested 79 (norm 68) percent of groves; economic in 9 (norm 11) percent. Population near the normal moderate level. Little change expected. Highest districts west and east. PURPLE SCALE (L. beckii) infested 68 (norm 69) percent of groves; economic in 6 (norm 6) percent. Population normal and moderate in all districts. Little change expected. CHAFF SCALE (Parlatoria pergandii) infested 45 (norm 51) percent of groves; economic in 2 (norm 6) percent. Recently decreased and now below normal abundance. Population will remain low in all districts. BLACK SCALE (Saissetia oleae) infested 45 (norm 40) percent of groves; economic in 15 (norm 16) percent. Population recently dropped to normal low level for year end. Continued decrease expected. Highest districts east and central. YELLOW SCALE (Aonidiella citrina) infested 64 (norm 62) percent of groves; economic in 11 (norm 11) percent. This scale is at normal moderate level and not expected to change. Highest districts north and east. An ARMORED SCALE (Unaspis citri) infested 25 percent of groves; moderate to heavy in 5 percent. Infestations became lighter and are not expected to intensify. WHITEFLY infested 66 (norm 67) percent of groves; economic in 19 (norm 14) percent. Population decreased to normal moderate level and will diminish further. (W.A. Simanton (Citrus Expt. Sta., Lake Alfred)).

AN ARMORED SCALE (Unaspis citri) - FLORIDA - All instars severe on 500 citrus trees in nursery at Apopka, Orange County. (Speaker, Jan. 8).

CITRUS RED MITE (Panonychus citri) - FLORIDA - Eggs ranged 15-30 per leaf in one lemon grove which had mite survival throughout 1969. (Ariz. Coop. Sur.).

FOREST AND SHADE TREES

PINE NEEDLE SCALE (Phenacaspis pinifoliae) - CALIFORNIA - Eggs and adults heavy on Monterey pine at Yuba City, Sutter County. (Cal. Coop. Rpt.).

OYSTERSHELL SCALE (Lepidosaphes ulmi) - CALIFORNIA - Heavy on maple tree nursery stock at San Jose, Santa Clara County. (Cal. Coop. Rpt.).

TWIG GIRDLER (Oncideres sp.) - TEXAS - Heavy damage on oaks 3 to 8 feet tall in Sam Houston National Forest in Montgomery County. (Barham).

MAN AND ANIMALS

SCREW-WORM (Cochliomyia hominivorax) - No cases reported in U.S. January 11-17. Total of 48 laboratory-confirmed cases reported in portion of Barrier Zone in Republic of Mexico January 4-10 as follows: Sonora 30, Chihuahua 16, Tamaulipas 2. Total of 6 cases reported in Mexico south of Barrier Zone. Barrier Zone is area where eradication operation underway to prevent establishment of self-sustaining population in U.S. Sterile screw-worm flies released: Texas 168,000; Mexico 77,000,000. (Anim. Health Div.).

CATTLE LICE - OKLAHOMA - Mainly Haematopinus eurysternus (short-nosed cattle louse) heavy on cattle in Cotton County. (Okla. Coop. Sur.).

BROWN RECLUSE SPIDER (Loxosceles reclusa) - NEBRASKA - Specimen collected from home at David City, Butler County on January 5, 1970. Identified by R.E. Roselle. This is a new county record. (Keith).

FEDERAL AND STATE PLANT PROTECTION PROGRAMS

IMPORTED FIRE ANT (Solenopsis saevissima richteri) - TEXAS - Heavy near Interstate Highway 45 in Montgomery County. (Barham). GEORGIA - Adults collected on roadside by B.F. Goolsby on January 6 in Clinch County. Determined by V.H. Owens, confirmed by D.R. Smith. This is a new county record. (PPD).

PINK BOLLWORM (Pectinophora gossypiella) - NEW MEXICO - One adult in hexalure trap at Carlsbad, Eddy County. All larvae dead inside cotton bolls, except for one larva. (Mathews).

HAWAII INSECT REPORT

General Vegetables - All instars of BEAN FLY (Melanagromyza phaseoli) moderate to heavy on backyard snap beans at Kohala, Hawaii; still negligible in commercial plantings throughout Oahu. (Yoshioka, Kawamura).

Fruits and Nuts - COCONUT SCALE (Aspidiotus destructor) colonies light to medium on foliage of 3 plumeria trees at Kaneohe, Oahu; first report on plumeria in Hawaii. (Funasaki). An ARMORED SCALE (Phenacaspis cockerelli) medium on 20 coconut trees, as many as 80 per leaflet, at Lahaina, Maui; and on foliage of about 200 commercially grown bird-of-paradise plants at Waimanalo, Oahu. (Ah Sam et al.). GREEN SCALE (Coccus viridis) medium, up to 24 (average 5 per leaf), on some leaves on 12 orange trees at Kahului and on grapefruit and gardenia at Makawao, Maui. Adults and larvae of Cryptolaemus montrouzieri (a lady beetle) medium in both areas. Heavy on Pittosporum sp. at Waikiki, Oahu. (Miyahira, Au). Adults of SOUTHERN GREEN STINK BUG (Nezara viridula) light on legume and orange trees at Pukalani and on legumes at Waikapu, Maui. Thirty percent of adults bore eggs of Trichopoda pennipes (a tachina fly). N. viridula nymphs light to medium on Dendrobium plants at Hawaii-kai, Oahu. (Ah Sam et al.).

Man and Animals - Adults of CLUSTER FLY (Pollenia rudis) heavy at Hookena, South Kona, Hawaii, at sea level for first time. All previous annoying activities from areas of over 700 feet elevation. (Yoshioka).

Miscellaneous Insects - A RHOPALID BUG (Jadera haematoloma) heavy on fruits and seeds of goldenrain-tree (Koelreuteria formosana) at Kona, Hawaii, for a new host and island record. Previously reported only on balloonvine on islands of Oahu and Kauai. (Yoshioka).

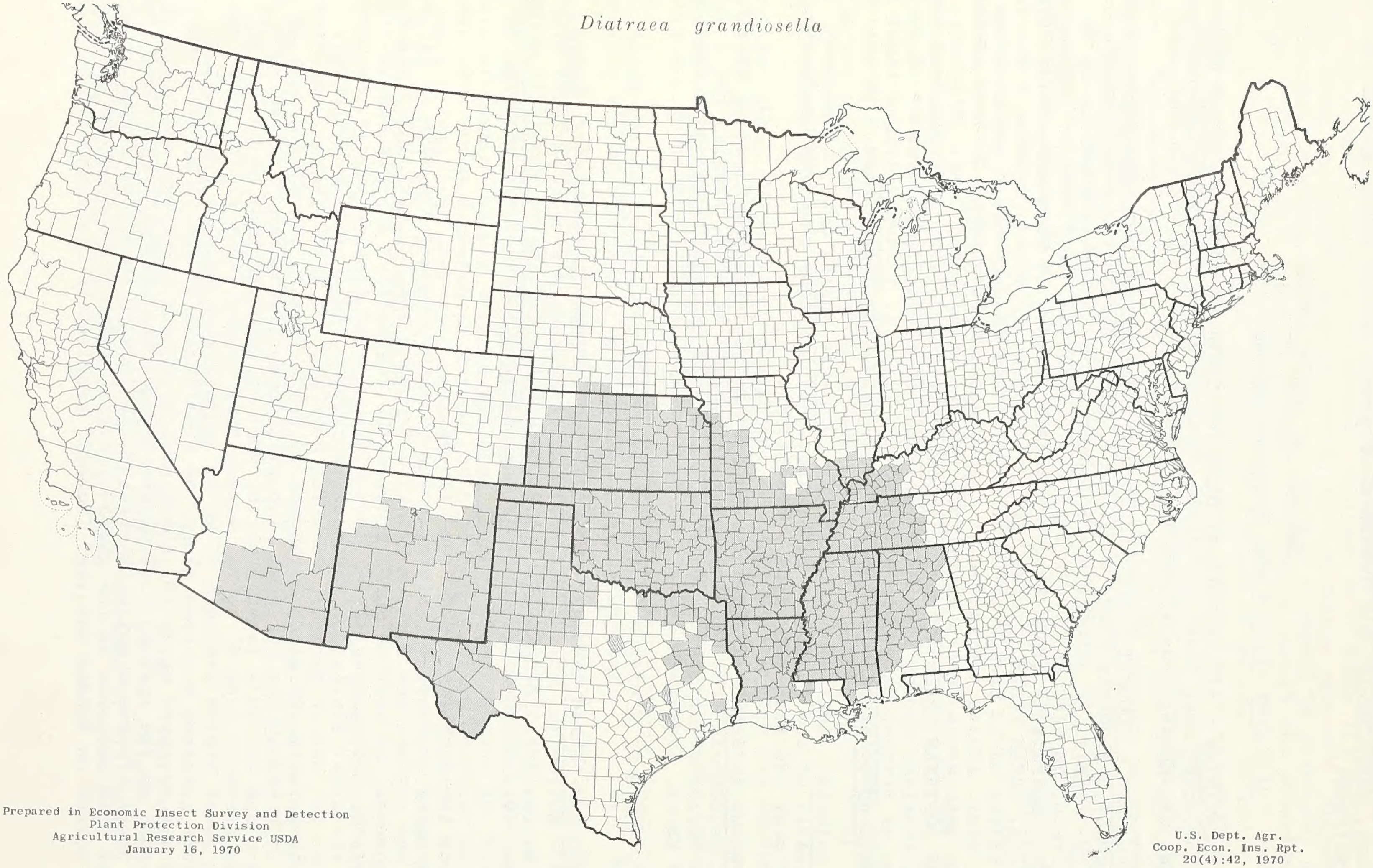
DETECTION

New County and Island Records - BROWN RECLUSE SPIDER (Loxosceles reclusa) NEBRASKA - Butler (p. 40). A HARVESTER ANT (Pogonomyrmex californicus) UTAH - Washington (p. 39). IMPORTED FIRE ANT (Solenopsis saevissima richteri) GEORGIA - Clinch (p. 40). A RHOPALID BUG (Jadera haematoloma) HAWAII - Hawaii (p. 41).

Weather of the week continued from page 38.
As the warming progressed farther north, maximums reached the 40's as far north as Ohio and western New York on Friday afternoon. The "January thaw" was short lived, however, as another surge dropped the temperature sharply Sunday night. Strong winds, racing down the eastern slopes of the Rockies warmed the western edge of the Great Plains. On Wednesday afternoon, North Platte, Nebraska, registered 59° but at Burwell, 90 miles northeast of North Platte, registered 59° but at Burwell, 90 miles northeast of North Platte, registered only 23°. Warming occurred in the Far West also with temperatures reaching the 60's in California and the 50's farther north. Most of the area west of the Rocky Mountains averaged from 6° to 15° warmer than normal. Most of the area from the northern Great Plains averaged 6° to 15° colder than normal. The greatest temperature gradient occurred along the Continental Divide in Montana where temperatures averaged up to 10° above normal west of the ridge and up to 27° below normal on the eastern side of the Divide. The mildest weather occurred in Florida where afternoon maximums reached the 70's on Sunday afternoon. The bitterest cold occurred in the northern Great Plains where minimums dropped to -30° or colder on Sunday morning. (Summary supplied by Environmental Data Service, ESSA).

Distribution of Southwestern Corn Borer

Diatraea grandiosella



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Additional copies of Parts I through XXV of this bibliography are available from Economic Insect Survey and Detection.

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